IMPORTANT SAFETY RULES Read, understand, and follow all instructions carefully before installing and using this product.

Krystal Clear Saltwater System® Model CS8110



Don't forget to try these other fine Intex products: pools, pool accessories, inflatable pools and in-home toys, airbeds and boats available at fine retailers or visit our website.



IMPORTANT! Do not return product to store

To purchase parts and accessories or to obtain non-technical assistance, Visit www.intexcorp.com

For technical assistance and missing parts call us toll-free (for U.S. and Canadian Residents): 1-800-234-6839

Monday through Friday, 8:30am to 5:00pm Pacific Time

131**-R0-1108

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IMPORTANT SAFETY RULES

Read, Understand and Follow All Instructions Carefully Before Installing and Using this Product

READ AND FOLLOW ALL INSTRUCTIONS

WARNING

- To reduce the risk of injury, do not permit children to use this product. Always supervise children and those with disabilities.
- Children must stay away from this product and all electrical cords.
- · Assembly and disassembly by adults only.
- Risk of electric shock. Connect this product only to a grounding type receptacle protected by a ground-fault circuit interrupter (GFCI). Contact a qualified electrician if you cannot verify that the receptacle is protected by a GFCI.
- Always unplug this product from the electrical outlet before removing, cleaning, servicing or making any adjustment to the product.
- Do not bury the electrical cord. Locate the cord where it will not be damaged by lawn mowers, hedge trimmers and other equipment.
- To reduce the risk of electric shock, the supply cord cannot be replaced. If the cord is damaged, the appliance should be replaced immediately.
- To reduce the risk of electric shock, do not use extension cords, timers, plug adaptors or converter plugs to connect unit to electric supply; provide a properly located outlet.
- Do not attempt to plug in or unplug this product while standing in water or when your hands are wet.
- Do not use an appliance leakage current interrupter (ALCI) in place of a GFCI since the ALCI will not protect people.
- Position this product away from the pool, so as to prevent children from climbing on it and accessing the pool.
- Do not operate this product when the pool is occupied.
- This product is intended to be used only for the purposes described in the manual!

FAILURE TO FOLLOW THESE WARNINGS MAY RESULT IN PROPERTY DAMAGE, ELECTRIC SHOCK, ENTANGLEMENT OR OTHER SERIOUS INJURY OR DEATH.

CAUTION

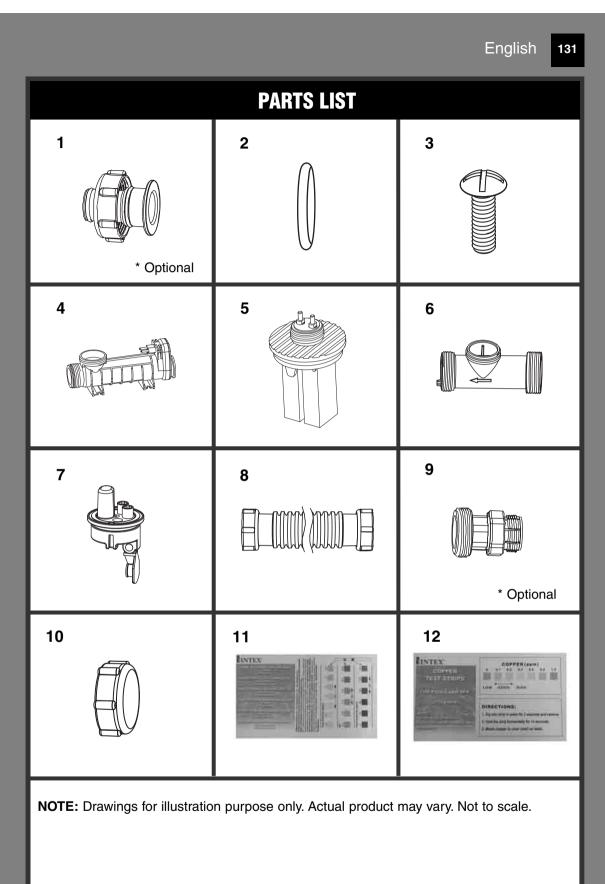
This product is for use with storable pools only. Do not use with permanently-installed pools. A storable pool is constructed so that it is capable of being readily disassembled for storage and reassembled to its original integrity. A permanently-installed pool is constructed in or on the ground or in a building such that it cannot be readily disassembled for storage.

These product warnings, instructions and safety rules provided with the product represent some common risks of water recreation devices and do not cover all instances of risk and danger. Please use common sense and good judgement when enjoying any water activity.

For portable Above-Ground-Pools only

SAVE THESE INSTRUCTIONS

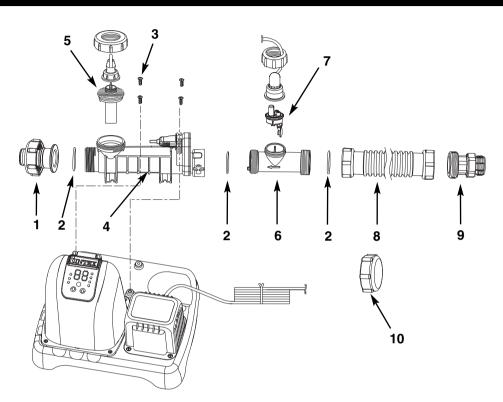
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ARTS LIST

PARTS REFERENCE

Before assembling your product, please take a few minutes to check the contents and become familiar with all the parts.



NOTE: Drawings for illustration purpose only. Actual product may vary. Not to scale.

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- · Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

PARTS REFERENCE (continued)

Before assembling your product, please take a few minutes to check the contents and become familiar with all the parts.

REF. NO.				
COMMON PARTS	PARTS FOR CONNECTION TO FILTER PUMPS WITH 1-1/4" (32MM) HOSE SIZE	DESCRIPTION	QTY.	SPARE PART NO.
	1	ADAPTOR A WITH THREADED COLLAR (OPTIONAL)	1	10849
2		O-RING A	3	10712
3		SCREW	4	10713
4		ELECTROLYTIC CELL (WITH TITANIUM PLATES) (O-RING A INCLUDED)	1	11233
5		COPPER ELECTRODE	1	11234
6		FLOW SENSOR CONDUIT	1	11250
7		FLOW SENSOR	1	11143
8		CONNECTOR HOSE WITH THREADED FITTINGS	1	10720
	9	THREADED ADAPTOR B (OPTIONAL)	1	10722
10		CELL COVER	2	11131
11		CHLORINE TEST STRIPS	1	19635
12		COPPER TEST STRIPS	1	11254

ARTS REFERENCE

When ordering parts, be sure to quote the model number and part numbers.

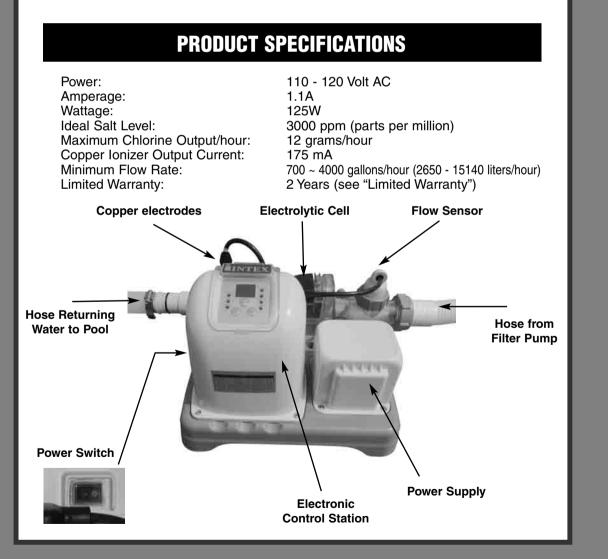
HOW THE CHLORINE IS GENERATED

This product is specially designed for above ground pools. It will destroy the bacteria, oxidize bather organics and control algae, which provide a safe, clean and comfortable swimming pool.

Common salt (sodium chloride) is made up of two elements, sodium and chloride. During the installation of your Saltwater System, a measured quantity of salt is dissolved in the pool water to make it slightly salty. The pool water flows through the Saltwater System 's electrolytic cell to produce chlorine. The chlorine dissolves in the water and instantly starts destroying bacteria and algae. It also oxidizes all other organic materials.

HOW COPPER IONS ARE GENERATED

Low voltage direct current is applied to the copper electrode, and copper ions are generated and dissolved instantly in the water. Copper is an effective algaecide, which will prevent algae from growing in the pool.



(131) MODEL CS8110 SALTWATER SYSTEM ENGLISH 7.5" X 10.3" PANTONE 295U 07/28/2010

English 131

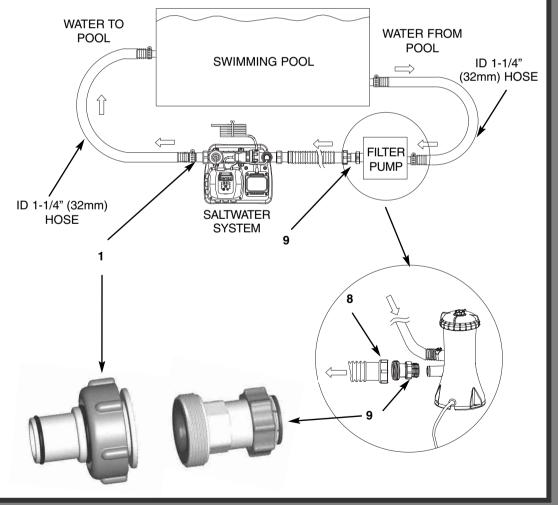
SETUP INSTRUCTIONS

IMPORTANT

- The Saltwater System requires a separate filter pump [700~4000 gph (2650~15140 lph)] to drive the water and function properly.
- The Saltwater System must be installed as the last piece of pool equipment in the water return line to the pool as displayed in Drawing #1. This location extends the life of the titanium plates.
- 1. Assemble the above-ground-pool (AGP) and its filter pump according to their installation instructions.
- 2. Take the Saltwater System and its accessories out of the packaging.
- **3**. Place the Saltwater System in line after the filter pump.
- 4. Connect the connector hose (8) to the Saltwater System inlet.

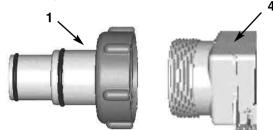
Connecting the system to pump and pool with 1-1/4" (32mm) connections/hoses:

The saltwater system features 1-1/2" (38mm) connections. It is accordingly supplied with adaptors A (1) and B (9) for connecting to the small 1-1/4" (32mm) diameter connections/hoses. Install as follows: Drawing #1

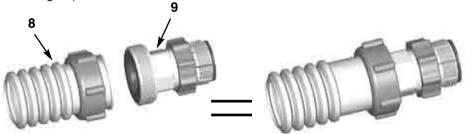


SETUP INSTRUCTIONS (continued)

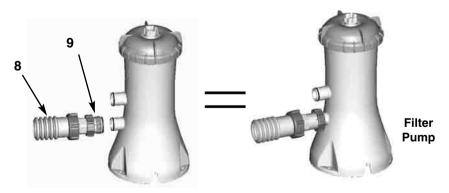
- 1. Go directly to step 2 if your pool is empty. If your above-ground-pool is filled with water, unscrew the strainer grids from the strainer connectors and insert the black hat-like plugs into the connectors, before installing the saltwater pool system.
- 2. Connect the adaptor A (1) to the electrolytic cell (4) outlet as shown in Drawing #1. Tighten securely.



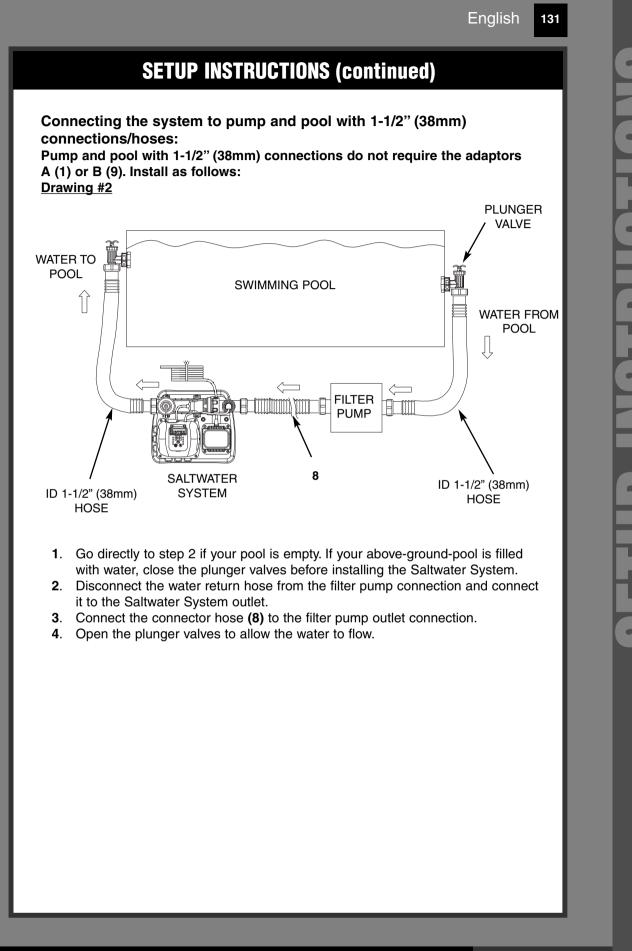
- Disconnect the water return hose from the filter pump connection and connect it to the adaptor A (1) on the Saltwater System with a hose clamp. (see Drawing #1)
- 4. Connect adaptor B (9) to the connector hose (8). Tighten securely. (see Drawing #1)



5. Connect adaptor B (9) to filter pump outlet (lower connection). Tighten securely.



6. Remove the black hat-like plugs that prevent water from flowing out of the pool. Now, return the strainer grids to the strainer connectors.

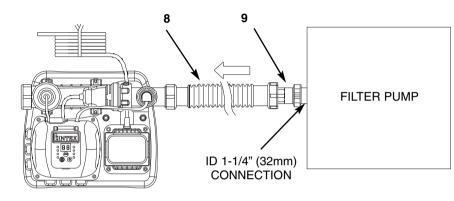


SETUP INSTRUCTIONS (continued)

Connecting the system to other types of pump (with different type of thread or no thread):

The Saltwater System can also be adapted to other filter pumps with different thread or those without a thread on the connection.

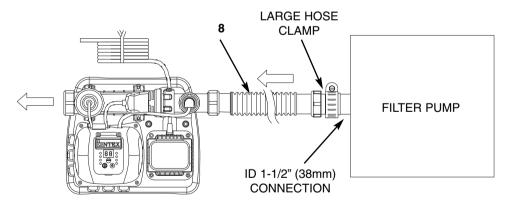
Connection to 1-1/4" (32mm) hose:



SALTWATER SYSTEM

- 1. Connect one end of adaptor B (9) to the connector hose (8). Tighten securely.
- 2. Now, connect the other end of adaptor B (9) to the filter pump outlet. Tighten securely.

Connection to 1-1/2" (38mm) hose with clamp:



SALTWATER SYSTEM

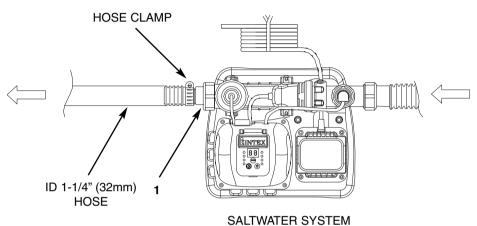
1. Connect the connector hose (8) to the filter pump outlet connection with a large hose clamp. Tighten securely.

SETUP INSTRUCTIONS (continued)

Connecting the system to other types of pool

After you have connected the Saltwater System to the pump, connect it to the pool. This is depicted in Drawings #1 and #2. Following are the common connection types:

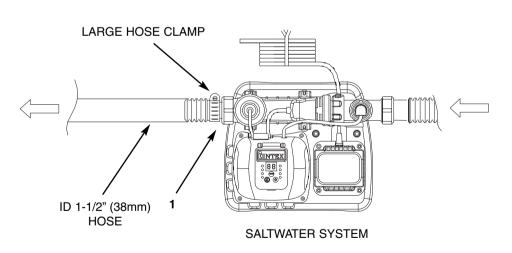
Connection to 1-1/4" (32mm) connectors:



1. Connect the adaptor A (1) to the electrolytic cell (4) outlet. Tighten securely.

The adapter A (1) is now fitted to the Saltwater System. The following step is to connect the water return hose to the adaptor A (1) with a hose clamp.

Connection to 1-1/2" (38mm) connectors without thread:



- 1. Connect the adaptor A (1) to the electrolytic cell (4) outlet. Tighten securely.
- 2. With the adaptor A (1) fixed to the Saltwater System, connect the water return hose to the adaptor, using a large hose clamp.

SALT & POOL WATER VOLUMES

Which kind of salt to use: Use only Sodium Chloride Salts

Use only sodium chloride (NaCl) salt that is at least 99.8% pure. It is also acceptable to use water conditioning salt pellets (the compressed forms of evaporated salt). However, it will take a longer time for them to dissolve. **Do not use iodized or yellow (yellow prussiate of soda) colored salt.** Salt is added to the pool water and the electrolytic cell uses the salt to create chlorine. The purer the salt the better the performance of the electrolytic cell.

Optimum Salt Levels

The ideal salt level in the pool water is between 2500-3500 ppm (parts per million). The optimal level is 3000 ppm.

A too low salt level will reduce the efficiency of the Saltwater System and result in low chlorine production. A high salt level may generate a salty taste to the pool water (this may occur at a salt level above 3500-4000ppm). Too high a salt level may damage the power supply and cause corrosion to the pool metal fixtures and accessories. The Salt Table page of this manual, shows the correct dosage of salt needed. The salt in the pool is constantly recycled. The loss of salt is due only to pool water being physically removed from the pool. Salt is not lost due to evaporation.

Adding Salt

- 1. Switch the filter pump on to start the water circulation.
- 2. Keep the Saltwater System turned off.
- 3. Determine the amount of salt to be added (see "Salt Table").
- 4. Evenly spread the proper amount of salt around the inside perimeter of the pool.
- 5. Avoid clogging the filter. Do not add salt through the skimmer.
- 6. Brush the pool bottom to speed up the dissolving process. Do not allow salt to pile up on the bottom of the pool. Run the filter pump 24 consecutive hours to thoroughly dissolve the salt.
- 7. After 24 hours and if all the salt is dissolved, turn on the Saltwater System and set the saltwater pool system to desired operating time (see "Operating Time Table").

• Removing Salt

If too much salt has been added, the unit will beep and display "Code 92" (see "Alarm Codes"). You will need to lower the salt concentration. The only way to do so, is to partially drain the pool and refill it with fresh water. Drain and refill approximately 20% of the pool's water until the "Code 92" disappears.

Pool Volume Calculation

Types of Pool	Gallons (pool size in feet)	Cubic Meters (pool size in meters)
Rectangular	Length x Width x Average Depth x 7.5	Length x Width x Average Depth
Circular	Length x Width x Average Depth x 5.9	Length x Width x Average Depth x 0.79
Oval	Length x Width x Average Depth x 6.0	Length x Width x Average Depth x 0.80

INTEX POOLS SALT TABLE

This table shows the amount of salt needed to achieve and maintain the optimal 3000 ppm salt level.

		90% for Frame	y (Calculated at Pool and 80% & Oval Pool)	% Startup Lo		Low Salt	Salt Needed when Low Salt Detected (CODE "91")	
		(Gals)	(Liters)	(Lbs)	(Kgs)	(Lbs)	(Kgs)	
INTEX ABOVE	GROUND POOLS (AGP's)					-		
	15' x 33" (457cm x 84cm)	2587	9792	65	30	20	10	
	15' x 36" (457cm x 91cm)	2822	10681	65	30	20	10	
	15' x 42" (457cm x 107cm)	3284	12430	80	35	20	10	
	15' x 48" (457cm x 122cm)	3736	14141	95	45	20	10	
EASY SET [®] POOL	16' x 42" (488cm x 107cm)	3754	14209	95	45	20	10	
	16' x 48" (488cm x 122cm)	4273	16173	110	50	30	15	
	18' x 42" (549cm x 107cm)	4786	18115	120	55	30	15	
	18' x 48" (549cm x 122cm)	5455	20647	135	60	35	15	
	18' x 52" (549cm x 132cm)	5894	22309	150	65	40	20	
	15' x 36" (457cm x 91cm)	3282	12422	80	35	20	10	
	15' x 42" (457cm x 107cm)	3861	14614	100	45	20	10	
	15' x 48" (457cm x 122cm)	4440	16805	110	50	30	15	
CIRCULAR	16' x 48" (488cm x 122cm)	5061	19156	125	55	30	15	
METAL	18' x 48" (549cm x 122cm)	6423	24311	160	75	40	20	
FRAME POOL	18' x 52" (549cm x 132cm)	6981	26423	175	80	45	20	
	20' x 52" (610cm x 132cm)	8638	32695	220	100	60	25	
	24' x 48" (732cm x 122cm)	11483	43462	290	130	75	35	
	24' x 52" (732cm x 132cm)	12481	47241	310	140	85	40	
ULTRA FRAME [®]	16' x 48" (488cm x 122cm)	5061	19156	125	55	35	15	
POOL	18' x 52" (549cm x 132cm)	6981	26423	175	80	45	20	
SEQUOIA SPIRIT®	16'8" x 49" (508cm x 124cm)	5061	19156	125	55	35	15	
POOL SET	18'8" x 53" (569cm x 135cm)	6981	26423	175	80	45	20	
	18' x 10' x 42" (549cm x 305cm x 107cm)) 2885	10920	65	30	20	10	
OVAL FRAME	20' x 12' x 48" (610cm x 366cm x 122cm)) 4393	16628	110	50	30	15	
POOL	24' x 12' x 48" (732cm x 366cm x 122cm)	5407	20465	135	60	35	15	
	28' x 12' x 48" (853cm x 366cm x 122cm)	6420	24300	160	75	40	20	
	18' x 9' x 52" (549cm x 274cm x 132cm)	4545	17203	115	50	30	15	
RECT. ULTRA	24' x 12' x 52" (732cm x 366cm x 132cm)	8403	31805	210	100	55	25	
	32' x 16' x 52" (975cm x 488cm x 132cm)	14364	54368	360	165	95	45	

INTEX POOLS OPERATING TIME TABLE (WITH CYANURIC ACID)

			y (Calculated at Pool and 80% & Oval Pool)	at diffe	ing Time rent amb mperatur	ient/air	Intex Filter pump Operating
		(Gals)	(Liters)	10 - 19°C (50 - 66°F)	20 - 28 °C (68 - 82 °F)		Time (hours)
INTEX ABOVE	GROUND POOLS (AGP's)						
	15' x 33" (457cm x 84cm)	2587	9792	1	1	1	2
	15' x 36" (457cm x 91cm)	2822	10681	1	1	1	2
	15' x 42" (457cm x 107cm)	3284	12430	1	1	2	4
EASY SET®	15' x 48" (457cm x 122cm)	3736	14141	1	2	2	4
	16' x 42" (488cm x 107cm)	3754	14209	1	2	2	4
	16' x 48" (488cm x 122cm)	4273	16173	2	2	2	4
	18' x 42" (549cm x 107cm)	4786	18115	2	2	2	4
	18' x 48" (549cm x 122cm)	5455	20647	2	2	3	4
	18' x 52" (549cm x 132cm)	5894	22309	2	2	3	4
	15' x 36" (457cm x 91cm)	3282	12422	1	1	2	4
	15' x 42" (457cm x 107cm)	3861	14614	1	2	2	4
	15' x 48" (457cm x 122cm)	4440	16805	2	2	2	4
CIRCULAR	16' x 48" (488cm x 122cm)	5061	19156	2	2	2	4
METAL	18' x 48" (549cm x 122cm)	6423	24311	2	2	3	4
FRAME POOL	18' x 52" (549cm x 132cm)	6981	26423	2	2	3	4
	20' x 52" (610cm x 132cm)	8638	32695	3	3	4	4
	24' x 48" (732cm x 122cm)	11483	43462	4	4	5	6
	24' x 52" (732cm x 132cm)	12481	47241	5	5	6	8
ULTRA FRAME [®]	16' x 48" (488cm x 122cm)	5061	19156	2	2	2	4
POOL	18' x 52" (549cm x 132cm)	6981	26423	2	2	3	4
SEQUOIA SPIRIT®	16'8" x 49" (508cm x 124cm)	5061	19156	2	2	2	4
POOL SET	18'8" x 53" (569cm x 135cm)	6981	26423	2	2	3	4
	18' x 10' x 42" (549cm x 305cm x 107cm)	2885	10920	1	1	1	2
-	20' x 12' x 48" (610cm x 366cm x 122cm)	4393	16628	2	2	2	4
POOL	24' x 12' x 48" (732cm x 366cm x 122cm)	5407	20465	2	2	3	4
	28' x 12' x 48" (853cm x 366cm x 122cm)	6420	24300	2	2	3	4
	18' x 9' x 52" (549cm x 274cm x 132cm)	4545	17203	2	2	2	4
RECT. ULTRA	24' x 12' x 52" (732cm x 366cm x 132cm)	8403	31805	3	3	4	6
	32' x 16' x 52" (975cm x 488cm x 132cm)	14364	54368	6	6	7	8

IMPORTANT

The filter pump running time should be 1 hour longer than the required operating time of the Saltwater System.

INTEX POOLS CYANURIC ACID TABLE

Cyanuric acid is a chemical that reduces the loss of chlorine in water due to ultraviolet rays. To maintain maximum performance, we recommend that the cyanuric acid level be maintained at approximately 1% of the salt, i.e. 100 Lbs (45 Kgs) salt x1% = 1 Lbs (0.45 Kgs) cyanuric acid.

Pool Size		90% for Fram	y (Calculated at e Pool and 80% t & Oval Pool)	Cyanuric Acid Needed for Startup 0.03g/L (30ppm)	
		(Gals)	(Liters)	(Lbs)	(Kgs)
INTEX ABOVE	GROUND POOLS (AGP's)				-
	15' x 33" (457cm x 84cm)	2587	9792	0.6	0.3
	15' x 36" (457cm x 91cm)	2822	10681	0.7	0.3
	15' x 42" (457cm x 107cm)	3284	12430	0.8	0.4
	15' x 48" (457cm x 122cm)	3736	14141	0.9	0.4
EASY SET [®] POOL	16' x 42" (488cm x 107cm)	3754	14209	0.9	0.4
TOOL	16' x 48" (488cm x 122cm)	4273	16173	1.1	0.5
	18' x 42" (549cm x 107cm)	4786	18115	1.2	0.5
	18' x 48" (549cm x 122cm)	5455	20647	1.4	0.6
	18' x 52" (549cm x 132cm)	5894	22309	1.5	0.7
	15' x 36" (457cm x 91cm)	3282	12422	0.8	0.4
	15' x 42" (457cm x 107cm)	3861	14614	1.0	0.4
	15' x 48" (457cm x 122cm)	4440	16805	1.1	0.5
CIRCULAR	16' x 48" (488cm x 122cm)	5061	19156	1.3	0.6
METAL	18' x 48" (549cm x 122cm)	6423	24311	1.6	0.7
FRAME POOL	18' x 52" (549cm x 132cm)	6981	26423	1.7	0.8
	20' x 52" (610cm x 132cm)	8638	32695	2.2	1.0
	24' x 48" (732cm x 122cm)	11483	43462	2.9	1.3
	24' x 52" (732cm x 132cm)	12481	47241	3.1	1.4
ULTRA FRAME [®]	16' x 48" (488cm x 122cm)	5061	19156	1.3	0.6
POOL	18' x 52" (549cm x 132cm)	6981	26423	1.7	0.8
SEQUOIA SPIRIT [®]	16'8" x 49" (508cm x 124cm)	5061	19156	1.3	0.6
POOL SET	18'8" x 53" (569cm x 135cm)	6981	26423	1.7	0.8
	18' x 10' x 42" (549cm x 305cm x 107cm)	2885	10920	0.7	0.3
OVAL FRAME POOL	20' x 12' x 48" (610cm x 366cm x 122cm)	4393	16628	1.1	0.5
	24' x 12' x 48" (732cm x 366cm x 122cm)	5407	20465	1.4	0.6
	28' x 12' x 48" (853cm x 366cm x 122cm)	6420	24300	1.6	0.7
	18' x 9' x 52" (549cm x 274cm x 132cm)	4545	17203	1.1	0.5
RECT. ULTRA FRAME POOL	24' x 12' x 52" (732cm x 366cm x 132cm)	8403	31805	2.1	1.0
	32' x 16' x 52" (975cm x 488cm x 132cm)	14364	54368	3.6	1.6

SALT CALCULATION FORMULA FOR ALL POOLS

Salt Needed for Startup (Lbs)	Salt Needed for Startup (Kgs)		Salt Needed when Low Salt Detected (Kgs)
Water Capacity (Gals) x 0.025	Water Capacity (Liters) x 0.003	Water Capacity (Gals) x 0.0067	Water Capacity (Liters) x 0.0008

SALT TABLE FOR COMMON NON-INTEX POOLS

Water	Capacity	Salt Needed for Startup		Low Salt	led when Detected = "91")
(Gals)	(Liters)	(Lbs)	(Kgs)	(Lbs)	(Kgs)
2000	7500	50	20	10	5
4000	15000	100	45	25	10
6000	22500	150	65	40	20
8000	30000	200	90	55	25
10000	37500	250	110	70	30
12000	45500	300	135	80	35
14000	53000	350	160	95	45

OPERATING TIME TABLE FOR COMMON NON-INTEX POOLS

Water	Capacity		perating Time (hour ent ambient/air temp	
(Gals)	(Liters)	10 - 19°C (50 - 66°F)	20 - 28 °C (68 - 82 °F)	29 - 36 °C (84 - 97 °F)
2000	7500	1	1	1
4000	15000	2	2	2
6000	22500	2	2	3
8000	30000	3	3	4
10000	37500	4	4	5
12000	45500	5	5	6
14000	53000	6	6	7

CYANURIC ACID TABLE FOR COMMON NON-INTEX POOLS

Water Capacity		Cyanuric Acid Ne 0.03g/L	
(Gals)	(Liters)	(Lbs)	(Kgs)
2000	7500	0.5	0.23
4000	15000	1.0	0.45
6000	22500	1.5	0.68
8000	30000	2.0	0.90
10000	37500	2.5	1.13
12000	45500	3.0	1.37
14000	53000	3.5	1.59

OPERATION INSTRUCTIONS

1. Turn on the filter pump.

2. Start up the unit:

Plug the power cord into the electrical outlet and test the GFCI/RCD (circuit breaker). Switch on the unit. Code "00" appears on the electronic control station's LED, indicating that the unit is in a Stand-By Mode. This is normal.

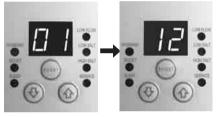
3. Unlock keypad controls:



Press and hold the **()** button for 2 seconds until you hear a short "beep". Then press and hold the **()** button for another 2 seconds until you hear the second short "beep". The LED flashes "00". This procedure unlocks the keypad control buttons.

4. Set operating hours for Saltwater system:

Increase the scheduled number of operating hours by pressing the button . Or reduce them by pressing the button . See the "Operating Time Table" for the required operating hours related to each pool size. Press the button to select the desired hours. You can press if you have selected too many hours. The built-in timer will now activate your Saltwater System, at the same time each day, for the number of hours you have set.



(1 to 12 hours max per cycle)

NOTE: The Saltwater System will not operate if the filter pump is not operating. Make sure to program your filter pump (or start it manually) for operation beginning 5 minutes before the saltwater system and finishing 15 minutes after the saltwater system.

5. Lock keypad controls:

With the desired hour value showing, press and hold the U button for 2 seconds until you hear a long "beep". Then press and hold for another 2 seconds until you hear the second long beep. A green "WORKING" indicator on the control panel will light up within a few seconds to indicate that the saltwater system has started chlorine production. Locking the control buttons into this setting prevents unauthorized changing of the operating cycle.

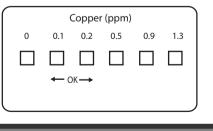
NOTE: If you forget to lock the keypad controls, the system will automatically lock it and start working 1 minute later.

6. Readjust operating time if necessary:

The operating hours can be re-adjusted if necessary. Just repeat the steps 3 through 5.

7. Test the copper concentration in the pool water.

The Saltwater System recommends a copper level of 0.1 to 0.2 ppm. This is easily tested by the copper ion test strips provided. If the test result is 0.1~0.2ppm, go directly to step 9.





OPERATION INSTRUCTIONS (continued)

8. Boost cycle

If the test result is below 0.1ppm, press and hold "BOOST" button for 5 seconds until the indicator lights up and the LED display "80". This indicates that the saltwater system has started copper ion production.
 You can press and hold the "BOOST" button for another 5 seconds until the indicator is off, which will cancel the Boost cycle.



Note: Once the system has started copper ion production, the boost button can't be re-set until the power switch is off.

- The boost operating hours is 4 times the amount of time programmed into the system, i.e. if your saltwater system operating time is 2 hours, the boost procedure will run 4 x 2 = 8 hours. After boost procedure has been completed, the system will automatically switch to the normal working mode.
- Once the boost is operating, check whether the filter pump operating hours have been set properly. For example, the boost operating time is 8 hours, the filter pump should be set to run for 8 hours at least. Increase the filter pump operating time if necessary.
 Note: If an Intex filter pump is attached to the system, set the pump switch to

Note: If an Intex filter pump is attached to the system, set the pump switch to on "I" position.

 After a heavy rain or if the pool is dirty, press the "BOOST" button to shock the pool again.

9. Test pool water regularly:

Once the copper level appears to be balanced, test the pool water every week to maintain the proper sanitizer level.

It's very important that the free chlorine is between 0.4-1.5 ppm and copper ion concentration is between 0.1~0.2 ppm. When the copper level is below 0.1 ppm, repeat step 8.

NOTE: A High copper ion concentration may cause blonde hair to exhibit a green hair. To prevent this, wear a swimming cap during swimming, and wash hair with special shampoo after using the pool. See "Troubleshooting Guide".

10. Stand-by/power saving mode:

- When the cycle ends, the green "SLEEP" indicator on the control panel lights up and the LED display flashes "93". The system is now in Stand-By mode. After a while, it shuts down and sets itself in a Power Saving mode. The system will automatically turn itself back on in 24 hours, starting its daily cycle of chlorine production.
- The "SLEEP" indicator stays on, while the system is in the Power Saving mode. The LED display however, goes blank after 1 hour. Press any button () to view the last LED code.





SAVE THESE INSTRUCTIONS

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LED CODE CHART

LED Reading	Definitions
80	Boost Mode
00	Stand-By Mode (Start-up)
01	Minimum Operating Hour (1 hour remaining)
02	Operating Hours (2 hours remaining)
03	Operating Hours (3 hours remaining)
04	Operating Hours (4 hours remaining)
05	Operating Hours (5 hours remaining)
06	Operating Hours (6 hours remaining)
07	Operating Hours (7 hours remaining)
08	Operating Hours (8 hours remaining)
09	Operating Hours (9 hours remaining)
10	Operating Hours (10 hours remaining)
11	Operating Hours (11 hours remaining)
12	Maximum Operating Hours (12 hours remaining)
90	Alarm Code (Low Water Flow / No Flow)
91	Alarm Code (Low Salt Level)
92	Alarm Code (High Salt Level)
93	Stand-By Mode (Operating Process finished)
"BLANK"	No Power or "Power Saving Mode" waiting to start next Saltwater System cycle.

IMPORTANT

When Code "90" alarm is shown, ensure the timer of the filter pump is set one (1) hour longer than the Saltwater System. If the filter pump does not have a built-in timer, the filter pump needs to be turned on/off manually every day.

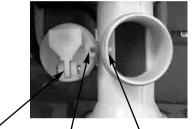
MAINTENANCE

IMPORTANT

Unplug the power cord before cleaning your system. Also close the plunger valves on your pool or insert the black hat-like plugs in the strainer opening to prevent water spillage. After completing all maintenance tasks, you must plug the power cord back in and open the plunger valves or remove the plugs.

Flow Sensor Cleaning

- 1. In a counter-clockwise motion unscrew the collar of the flow sensor (7) and remove it from the electrolytic cell conduit (6). See "Part Reference".
- 2. If deposits and debris are seen on the surface of the flow sensor, then use a garden hose to wash it off.



Hinge Locator Notch Connection Ridge

- **3**. If flushing with water does not remove the deposits, use a plastic brush to clean the surface and the hinge if necessary. Do not use a metal brush.
- 4. After the flow sensor has been inspected and cleaned, align the locator notch on the flow sensor to the connection ridge in the conduit. Now turn the collar in a clockwise motion, tightening the sensor back into its position. Do not overtighten.

Electrolytic Cell Cleaning

The electrolytic cell **(6)** has a self cleaning function incorporated into the electronic control's programming. In most cases this self cleaning action will keep the cell working at optimum efficiency. If the pool water is hard (high mineral content) the cell may require periodic manual cleaning. To maintain maximum performance, we recommend that you open and visually inspect the electrolytic cell **(6)** monthly. The following steps provide instructions on how to clean your cell.

Inspection and cleaning:

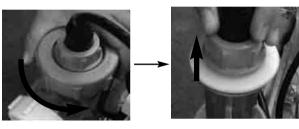
- 1. Switch off the unit, unplug the power cord from the electrical socket.
- For filter pumps with 1-1/4" (32mm) hose size To prevent water from flowing out of the pool, unscrew the strainer grids from the strainer connectors and insert the hat-like plugs into the strainer connectors.
 For filter pumps with 1-1/2" (38mm) hose size Grasp a plunger valve handle. Turn the handle counter-clockwise, push down until it stops and then turn it clockwise until the plastic protruding notch anchors in the "0/I" position. Repeat for the second plunger valve. This prevents the water from flowing out of the pool.

MAINTENANCE (continued)

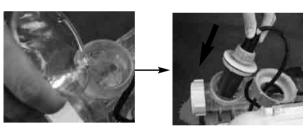
3. Disconnect the 2 hoses from the Saltwater System, and assemble the cell cover **(10)** at each side of the cell.



4. In a counter-clockwise motion, unscrew the collar of the copper electrode (5) and remove it from the electrolytic cell (4). Lift up the copper electrode.



5. Pour kitchen grade vinegar into the cell to immerse the titanium plates. Then put the copper electrode back in the cell, soak them for about one hour until no colored areas remain.



6. Open one side of the cell cover **(10)**, drain and properly dispose of the vinegar. Connect the hose which goes from the pool to the cell. Flush the cell with the pool water.



7. Reverse steps 3, 4, 5 and 6 to reconnect the electrolytic cell.

SAVE THESE INSTRUCTIONS

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MAINTENANCE (continued)

INTEX® COPPER ION TEST STRIPS (PACKED WITH THE PRODUCT)

The Copper Ion Test Strips can be used to test the copper ion concentration in the water.

Directions and Use

- 1. Dip the entire strip into the water for 3 seconds, then remove it
- 2. Hold the strip level for 15 seconds. Do not shake excess water from the strip.
- **3**. Now compare the copper ion strip pad to the color chart on the packaging label.

INTEX® 3-WAY TEST STRIPS (PACKED WITH THE PRODUCT)

The 3-Way Test Strips can test the "Free Chlorine", "pH", and "Total Alkalinity" levels at the same time. We recommend that you test the water chemistry weekly, and maintain the chlorine concentration at 0.4-1.5 ppm.

Directions and Use

- 1. Dip the entire strip into the water and remove immediately.
- 2. Hold the strip level for 15 seconds. Do not shake excess water from the strip.
- **3**. Now compare the strip pad to the color chart on the packaging label. If necessary, adjust the chemical level in the pool water. It is very important, to
- use the proper technique when testing the water's chemical level. Read and follow the written strip instructions carefully.

LONG TERM STORAGE

- 1. Disconnect the power cord from the electrical outlet.
- **2**. After the pool is completely empty, disconnect the Saltwater System from the hoses by reversing the installation instructions.
- **3**. Air-dry the unit before you store it. This might be a good time to visually inspect and clean the electrolytic cell.
- Store the unit and accessories in a dry place. The temperature should be controlled, between 32 degrees Fahrenheit (0 degrees Celsius) and 97 degrees Fahrenheit (36 degrees Celsius).
- 5. The original package can be used for storage.

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POOL MAINTENANCE & CHEMICAL DEFINITIONS

Prefe	rred Water Chem	istry Reading			
	Minimum	Ideal	Maximum		
Copper lons	0	0.1 - 0.2 ppm	0.2 ppm		
Free Chlorine	0	0.4 - 1.5 ppm	3.0 ppm		
Combined Chlorine	0	0 ppm	0.2 ppm		
рН	7.2	7.4 - 7.6	7.8		
Total Alkalinity	100 ppm	100 - 140 ppm	140 ppm		
Calcium Hardness	150 ppm	200 - 400 ppm	500 - 1000 ppm		
Stabilizer (Cyanuric Acid)	10 ppm	30 - 50 ppm	100 ppm		
Free Chlorine - Is the chlorine residual present in pool water.					
Combined Chlorine -	Is formed by the reasonable wastes.	action of free chlorin	e with ammonia		
	Result if too high -	Sharp chlorinous of	dor, eye irritation.		
рН -	 A value that indicates how acidic or basic a solution is. Result if too low - Corroded metals, eye & skin irritati destruction of total alkalinity. Result if too high - Scale formation, cloudy water, sho filter runs, eye & skin irritation, poor chlorine efficiency. 				
Total Alkalinity -	Indicates the degree of the water's resistance to change in pH. It determines the speed and ease of pH change, so always adjust total alkalinity before adjusting the pH level. Result if too low - Corroded metals, eye & skin irritation Low alkalinity will cause the pH to be unstable. Any chemical added to the water will have an affect on pH. Result if too high - Scale formation, cloudy water, eye & skin irritation, poor chlorine				
Calcium Hardness -	efficiency. Refers to the amount of calcium and magnesium dissolved in the water. Result if too high - Scale will form and will cause the water to become cloudy.				
Stabilizer - (Cyanuric Acid)	Stabilizers extend the life of chlorine in swimming pools.				

• Do not add pool chemicals directly to the skimmer. This may damage the cell.

- Maintaining a salt and sanitizer level above the recommended range can contribute to the corrosion of the pool equipment.
- Check the expiry date of the test kit as the test results may be inaccurate if the kit is used after that date.
- If, due to heavy pool usage, it is required to increase the sanitizer level, then use a chemical based on Trichloro-s-triazinetrione or sodium dichloro-s-triazinetrione dihydrate.

TROUBLESHOOTING GUIDE

· · · · · · · · · · · · · · · · · · ·			
PROBLEM	CAUSE	SOLUTION	
INSUFFICIENT CHLORINE	 Insufficient operating hours of the Saltwater System. The salt level in the pool water is less than 2000ppm. This is insufficient. Chlorine loss due to intense sunlight exposure. The bather load has increased. Clogged or dirty electrolytic cell. 	 Increase the daily Saltwater System operating time. See "Operating Instructions". Check the salt level with the Test Kit. Adjust as needed. See "Salt & Pool Water Volumes". Use a pool cover when the pool is not in use and/or when the unit is operating. Increase the daily Saltwater System operating time. See "Operating Instructions". Remove the cell for inspection, clean it if necessary. See "Maintenance". 	
INSUFFICIENT COPPER ION LEVEL	 Insufficient operating hours. The PH is too high. The bather load has increased. Clogged or dirty electrolytic cell. Copper electrode defective. 	 Increase operating time per day. See "Operating Instructions". Use PH decrease chemical to adjust, contact your local pool chemical store. Increase the operating time per day. See "Operating Instructions". Remove the cell for inspection, clean it if necessary. See "Maintenance". Contact Intex Service Center. 	
POOL IS STAINED	High copper ion concentration.	 Drain about 20% of the pool water and add fresh water to decrease the copper ion con centration below 0.2ppm. Add aluminum sulfate: 1000 liters water need around 2g (1000 gals need 0.27 ounce) or aluminum potassium sulfate: 1000 liters water need around 3g (1000 gals need 0.4 ounce) to pool. Use a lemon based cleaning product (preferably containing citric acid). Don't scrub with aggressive cleaning products because this might etch the underlying surface. 	
WHITE FLAKES IN THE WATER	 Excessive calcium hardness is present in pool water. 	• Drain about 20 to 25% of the pool water and add fresh water to decrease the calcium hardness. Inspect the electrolytic cell for scale buildup. Clean the electrolytic cell if necessary.	
NO LED DISPLAY	 No power supply. RCD/GFCI has not reseted. A power fuse has blown. LED failure. 	 Plug the cell cord firmly into the cell housing receptacle. Reset the RCD/GFCI. Contact Intex Service Center. Contact Intex Service Center. 	
GREEN HAIR	High copper ion concentration.	 Drain about 20% of the pool water and add fresh water to decrease the copper ion concentration below 0.2ppm. Add aluminum sulfate: 1000 liters water need around 2g (1000 gals need 0.27 ounce) or aluminum potassium sulfate: 1000 liters water need around 3g (1000 gals need 0.4 ounce) to pool. Use 'Ultra-Swim' shampoo, or shampoo containing chelating agents. 	
IMPORTANT			

IMPORTANT

If you continue to experience difficulty, please contact our Consumer Service Department for assistance. See back cover for contact information.

SAVE THESE INSTRUCTIONS

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TROUBLESHOOTING GUIDE (continued)

LED PANEL CODE	PROBLEM	SOLUTION
LED Panel Code Flash & Alarm On (NOTE: Always turn off the power before cleaning and servicing)		
	 Filter pump not attached to system and/or switch on. 	 Ensure filter pump is attached and operating. See "Setup Instruction".
	2. Circulation line is blocked.	 If your unit has plunger valves, ensure that they are open. Clear your filter cartridge and cell from debris and dirt. See "Maintenance". Release all trapped air in the circulation line. See the filter pump manual.
	3. Incorrect inlet and outlet hose direction.	 Check the direction of the inlet and the outlet hose. Reverse the hoses if necessary. See "Set Up Instructions".
	 Incorrectly installed flow sensor conduit. 	• Check that the arrow on the flow sensor conduit points in the same direction as the one on the cell. Reverse the flow sensor conduit if necessary.
	5. Scale on the flow sensor.	 Clean the flow sensor, paying special attention to the hinge. See "Maintenance".
	6. Flow sensor cord is loose.	 Plug the flow sensor firmly into the flow sensor receptacle.
	7. Flow sensor failure.	Contact Intex Service Center.
	8. Inner timer conflict between filter pump and saltwater system.	Reset both timers on the filter pump and saltwater system.See "Boost Cycle".
	1. Dirt or scale on titanium plates.	 Remove the electrolytic cell for inspection. Clean it if necessary. See "Maintenance".
	2. Low salt level / No salt.	 Add salt. See "Salt & Pool Water Volumes".
	3. Electrolytic cell cord is loose.	Ensure that the cell cord is plugged firmly into the cell housing receptacle.
	4. Possible electrolytic cell failure.	Contact Intex Service Center. Replace the cell if needed.
92 • 9 • • •	1. High salt level.	 Partially drain the pool and refill it with fresh water. See "Salt & Pool Water Volumes".
	 Display and all lights are off - the system does not power up. 	 Household voltage is too high or too low (± 20%). Check the voltage is within the range stated on the device housing. Contact Intex Service Center.

SAVE THESE INSTRUCTIONS

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GENERAL AQUATIC SAFETY

Water recreation is both fun and therapeutic. However, it involves inherent risks of injury and death. To reduce your risk of injury, read and follow all product, package and package insert warnings and instructions. Remember, however, that product warnings, instructions and safety guidelines cover some common risks of water recreation, but do not cover all risks and dangers.

For additional safeguards, also familiarize yourself with the following general guidelines as well as guidelines provided by nationally recognized Safety Organizations:

- Demand constant supervision. A competent adult should be appointed as a "lifeguard" or water watcher, especially when children are in and around the pool.
- Learn to swim.
- Take the time to learn CPR and first aid.
- Instruct anyone who is supervising pool users about potential pool hazards and about the use of protective devices such as locked doors, barriers, etc.
- Instruct all pool users, including children what to do in case of an emergency.
- Always use common sense and good judgement when enjoying any water activity.
- Supervise, supervise, supervise.

For additional information on safety, please visit

- The Association of Pool and Spa Professionals: The Sensible Way to Enjoy Your Aboveground/Onground Swimming Pool www.nspi.org
- American Academy of Pediatrics: Pool Safety for Children www.aap.org
- Red Cross www.redcross.org
- Safe Kids www.safekids.org
- Home Safety Council: Safety Guide www.homesafetycouncil.org
- Toy Industry Association: Toy Safety www.toy-tia.org

SAFETY IN YOUR POOL

Safe swimming depends on constant attention to the rules. The "NO DIVING" sign within this manual can be posted near your pool to help keep everyone alert to the danger. You may also wish to copy and laminate the sign for protection from the elements.

LIMITED WARRANTY

Your Krystal Clear Saltwater System[®] has been manufactured using the highest quality materials and workmanship. All Intex products have been inspected and found free of defects prior to leaving the factory. This Limited Warranty applies only to the Krystal Clear Saltwater System[®].

The provisions of this Limited Warranty apply only to the original purchaser and is not transferable. This Limited Warranty is valid for a period of two (2) years from the date of the initial retail purchase. Keep your original sales receipt with this manual, as proof of purchase will be required and must accompany warranty claims or the Limited Warranty is invalid.

If a manufacturing defect is found within this two (2) years period, please contact the appropriate Intex Service Center listed in this manual. The Service Center will determine the validity of the claim. If the Service Center directs you to return the product, please carefully package the product and send with shipping and insurance prepaid to the Service Center. Upon receipt of the returned product, the Intex Service Center will inspect the item and determine the validity of the claim. If the provisions of this warranty cover the item, the item will be repaired or replaced at no charge.

Any and all disputes regarding the provisions of this Limited Warranty shall be brought before an informal dispute settlement board and unless and until the provisions of these paragraphs are carried forth, no civil action may be instituted. The methods and procedures of this settlement board shall be subject to the rules and regulations set forth by the Federal Trade Commission (F.T.C.). IMPLIED WARRANTIES ARE LIMITED TO THE TERMS OF THIS WARRANTY AND IN NO EVENT SHALL INTEX, THEIR AUTHORIZED AGENTS OR EMPLOYEES BE LIABLE TO THE BUYER OR ANY OTHER PARTY FOR DIRECT OR CONSEQUENTIAL DAMAGES OR LIABILITIES. Some states, or jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Limited Warranty does not apply if the Krystal Clear Saltwater System[®] is subject to negligence, abnormal use or operation, accident, improper operation, improper voltage or current contrary to operating instructions, or to damage by circumstances beyond Intex's control, including but not limited to, ordinary wear and tear and damage caused by exposure to fire, flood, freezing, rain, or other external environmental forces. This Limited Warranty applies only to those parts and components sold by Intex. The Limited Warranty does not cover unauthorized alterations, repairs or disassembly by anyone other than Intex Service Center personnel.

DO NOT GO BACK TO THE PLACE OF PURCHASE FOR RETURN OR REPLACEMENT. IF YOU ARE MISSING PARTS OR NEED ASSISTANCE, PLEASE CALL US TOLL-FREE (FOR U.S. AND CANADIAN RESIDENTS): 1-800-234-6839.

Proof of Purchase must accompany all returns or the warranty claim will be invalid.

COUNTRIES/REGIONS	SERVICE CENTER LOCATIONS
• UNITED STATES • CANADA	INTEX RECREATION CORP. 14779 Bar Harbor Road Fontana, CA 92336 Tel: 1-800-234-6839 Fax: 310-549-2900 Website: www.intexcorp.com (U.S./Canada only) Consumer Service Hours: 8:30 am to 5:00 pm Pacific Time, Mon. thru FRI. only.
• MEXICO	KAY INTERNACIONAL, S.A. DE C.V. SAN JERONIMO # 550- INT.501 Y 502. COL. JARDINES DEL PEDREGAL. C.P. 01900 MÉXICO D.F. Tel: 01-800-347-4020 (Collect Call) Tel: 55-9172-8035 Fax: 55-9172-8047 E-mail: servicenter@kayinternacional.com Website: www.intexmexico.com.mx
• PANAMA • PARAGUAY • ECUADOR • HONDURAS • EL SALVADOR • NICARAGUA	SUPRO MUNDIAL S.A./ PRODUCTOS SUPERIORES S.A. Boulevard Andrews, Albrook, Panama, Rep. of Panama Tel: 507-300-3800 Fax: 507-300-3813 E-mail: suproadmin@supropanama.com
• COSTA RICA • DOMINICAN REPUBLIC • GUATEMALA • COLOMBIA • VENEZUELA	CENTURY USA, LLC 4731 W. Atlantic Ave., Suite B-3 Delray Beach, FL 33445, USA Tel: 561-495-0648 Fax: 561-495-4782 E-mail: sales@centuryusa.com
• MIDDLE EAST REGION REGION	FIRST GROUP INTERNATIONAL AL MOOSA GROUP BUILDING, 1ST FLOOR, OFFICE 102 & 103, UMM HURAIR ROAD, KARAMA, DUBAI, UAE TEL: 00971-4-800INTEX(46839) / +971-4-3373322 FAX: 00971-4-3375115 E-mail: intex@firstgroupinternational.com. Website: www.firstgroupinternational.com
ASIA For answers to most frequently asked questions, pla	INTEX DEVELOPMENT CO. LTD. 9th Floor, Dah Sing Financial Centre 108 Gloucester Road, Wanchai, Hong Kong Tel: 852-28270000 Fax: 852-23118200 E-mail: xmservicesupport@intexcorp.com.cn Website: www.intexdevelopment.com

For answers to most frequently asked questions, please visit WWW.intexcorp.com. Non U.S. Residents, please visit WWW.intexdevelopment.com.



For Residents of the U.S. & Canada: INTEX RECREATION CORP. Attn: Consumer Service 14779 Bar Harbor Road Fontana, CA 92336 Phone: 1-800-234-6839 Fax: (310) 549-2900

@

Consumer Service Hours: 8:30 am to 5:00 pm Pacific time Monday thru Friday only Website: www.intexcorp.com

For Residents outside of the U.S. and Canada: Please refer to the Service Center Locations

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